## **CHAPTER 1**

## INTRODUCTION

Dairy farming in Thailand was extensively promoted since 1961, when the first dairy farm was founded in Muag Lek District, Saraburi Province with technical support from the Danish government. During the past 40 years, it has been practicing throughout the country.

Nowadays, the demand of milk consumer is increasing. So, the government is trying to increase the quantity of milk for Thai consumers and to decrease the import of dairy products. However, the good supporting program should not only aim to increase quantity of milk but also to enhance the quality of milk in order that the people can consume the good quality milk free from all pathogens and any residues that can affect to human health.

The Dairy Cooperative is an organization which has the responsibility to collect raw milk from farmers and sell it to the dairy plant. In this information technology world, the consumer has a lot of information to choose some products with high and satisfactory quality. Nowadays, the marketing competition is higher, dairy plants also try to have a system or a regulation to buy raw milk, such as an implementation of premium quality milk, in order to produce the high quality milk product. So, the dairy cooperative (DO), the raw milk collector, tries to improve the raw milk quality from dairy farmers and develop the management system of milk collecting center (MCC). The outcome is not only directly affect dairy farmers such as receiving higher income but also adversely affect dairy plants such as receiving higher

quality of raw milk before and prolonging shelf-life of the dairy product. Finally, the consumers can get high quality milk products which is safe for consumption.

However, to encourage the raw milk quality, DO and MCC have to understand many factors which have an effect on the raw milk quality, especially at the herd-level where milk is able to be contaminated at the first step. This information can help the officer of the MCC to solve some problems of milk quality and to give the right and good instructions for their farmer member. Additionally, at the MCC-level, the responsible person should understand the right and good management system, and they should know the controlling program in order to control all factors from the MCC which decrease the raw milk quality. Indeed, the best scheme is to keep the raw milk fresh and no residue before processing at the dairy plants.

## **OBJECTIVES**

- 1. To investigate the herd-level factors affecting the raw milk quality (the microbiological quality) in Chiang Mai and Lamphun Provinces (Study A)
- 2. To survey the data base information of the raw milk quality at the milk collecting center level in Chaing Mai and Lamphun Provinces (Study B)
- 3. To survey the basic information of the milk collecting center characteristics (Study C)